

Status:

IECEx Certificate of Conformity

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INTERNATIONAL ELECTROTECHNICAL COMMISSION **IEC Certification System for Explosive Atmospheres**

for rules and details of the IECEx Scheme visit www.iecex.com

R S Sinclair

Certificate No.: **IECEx BAS 16.0124X**

> Issue No: 3 Current

2023-08-01 Date of Issue:

Applicant: **Longvale Limited**

Lancaster Park Needwood Burton-upon-Trent Staffordshire **DE13 9PD United Kingdom**

Equipment: Euroswitch FL-A and LS-A

Optional accessory:

Type of Protection: **Intrinsic Safety**

Ex ia IIC T4 Ga (-60°C ≤ Ta +125°C) Marking:

Ex ia III C T135°C IP66/67 Da (-60°C ≤ Ta +125°C)

Ex ia IIC T6 Ga (-20°C ≤ Ta +80°C)

Ex ia III C T85°C IP66/67 Da (-20°C ≤ Ta +80°C)

Approved for issue on behalf of the IECEx

Certification Body:

Position: **Technical Manager**

Signature:

(for printed version)

(for printed version)

1/8/2023

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Certificate history: Issue 2 (2021-12-02)

Issue 1 (2020-01-09) Issue 0 (2016-12-08)

Certificate issued by:

SGS UK Limited Rockhead Business Park Staden Lane **Buxton, Derbyshire SK17 9RZ United Kingdom**





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Date of issue: 2023-08-01 Issue No: 3

Manufacturer: Longvale Limited

Lancaster Park Needwood Burton-upon-Trent Staffordshire DE13 9PD United Kingdom

Manufacturing locations:

Lancaster Park Needwood Burton-upon-Trent Staffordshire DE13 9PD United Kingdom

Longvale Limited

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended

STANDARDS:

The equipment and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards

IEC 60079-0:2017 Explosive atmospheres - Part 0: Equipment - General requirements

Edition:7.0

IEC 60079-11:2011 Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"

Edition:6.0

This Certificate **does not** indicate compliance with safety and performance requirements other than those expressly included in the Standards listed above.

TEST & ASSESSMENT REPORTS:

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in:

Test Reports:

GB/BAS/ExTR16.0339/00 GB/BAS/ExTR19.0344/00 GB/BAS/ExTR21.0203/00 GB/SGS/ExTR23.0014/00

Quality Assessment Report:

GB/SIR/QAR07.0013/15



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EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

The Euroswitch FL-A and LS-A is designed for the measurement of flow or level respectively.

The units are manufactured in stainless steel and comprise a switch body secured into a terminal head enclosure with a threaded cover. The switch body may be of fixed orientation (Type WL), or have a rotatable head (Type WLR). A cable entry boss is welded to the terminal head to providing a single threaded M20 or 1/2" NPT entry to accommodate a suitably certified cable gland.

Alternatively a single M20 or 1/2" NPT entry may be provided in the threaded cover of the fixed unit (Type W).

In all case the cover is retained in position by means of a grub screw.

The terminal head houses up to 7 terminals (including 1 earth connection) depending on the switch type. These terminals are mounted on to a printed circuit board, and are for the external connection to a separately certified intrinsically safe circuit.

The switch body contains up to 2 DPDT micro switches, which are activated via a magnet operated lever assembly in the lower half of the switch body. The switch is secured into the vessel/pipework via a BSPT thread on this body section.

Each set of switch contacts may be supplied from a separately certified intrinsically safe source and individually they have the following terminal parameters:

Ui = 30V li = 250mA

Pi = 1.3W

See Annex for part numbering options.

SPECIFIC CONDITIONS OF USE: YES as shown below:

- 1 External earth bonding of the stainless steel enclosure may be achieved via the external mounting thread and/or the threaded cable entry.
- 2 Metallic switches may pose an electrostatic risk if not earthed. This should be taken into account during installation.
- 3 Where a sensor has two sets of switching contacts, both sets of switching contacts may be considered to be separate intrinsically safe circuits. Where the two circuits are separate intrinsically safe circuits, the user shall ensure segregation of the external cabling between the two circuits is maintained during installation and either type A or type B cable as defined in clause 9.5.2 & 9.5.3 of IEC 60079-25:2010 is used.
- 4 It is the responsibility of the installation engineer to ensure that suitably rated cable and cable glands are used to install this equipment.
- 5 Only fasteners of type M4 x 0.7 6g socket set screw DIN913 type 316 stainless steel may be used for preventing rotation of the lid and/or WLR connection head in the installed position.
- 6 The process medium must not exceed the ambient temperature range of the equipment.



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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

Variation 3.1

The release of this new issue permits the use of an alternative housing construction that does not impact the intrinsically safe aspects of the equipment assessed previously.

ExTR: GB/SGS/ExTR23.0014/00 File Reference: 23/0119

Annex:

IECEx BAS 16.0124X Annex Iss 1.pdf

SGS Baseefa Limited

Rockhead Business Park Staden lane, Buxton, Derbyshire SK17 9RZ **United Kingdom**



ANNEX to IECEx BAS 16.0124X

Issue No. 1

Date: 9 January 2020

Flow Switch Ex ia - Part Number Matrix

Switch & ATEX Markings ple Certification Markings (Exd only) regional Exia certification ses Steel 316L 5°C = -20°C to +80°C 35°C = -60°C to +125°C SSPT (NPT optional) 15FT (NPT optional)		A	2 E F-Z	2	1 2		1 2						
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	-					-	5					-	
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BSPT (NPT optional)							7						
e Supplied (Tee connection must be a 1)								-	0	-			
ied with Stainless Steel 316 Equal Tee (as per Tee Connection)								-	2	-			
SPCO	-							_		-			
/DPCO	-					-					D		
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Flashed	*										AU		
ble Connection Head - Ton Entry 1/2" NPT						_							W-NPT
	_					-				-		-	WL-NPT
	_					i i		· ·		<u> </u>	-	_	WLR-NPT
											-		W-M20
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Level Switch Ex ia - Part Number Matrix

	LS	-	X	X	х	X	-	X	-	X	-	X	-	X
				_										
Series	Level Switch - Horizontal Mount		A						*					
				_							-	_		
Certification	IECEX & ATEX Markings			2					٠					
	Multiple Certification Markings (Exd only)	٠		E							-			
	Other regional Exd certification	_		F-Z										
Housing Material	Stainless Steel 316L				2									
Certified	T6/T85°C = -20°C to +80°C					1			-				-	
Temp.	T4/T135°C = -60°C to +125°C	-				2	·				·		-	
	1/2" BSPT (NPT optional)			\vdash			-	1						
tio	3/4" BSPT (NPT optional)			_			-	2	-		1			
96	1" BSPT (NPT optional)							3						
ou	1-1/4" BSPT (NPT optional)							4						
SS	1-1/2" BSPT (NPT optional)			-				5						
Process Connection	2" BSPT (NPT optional)							6						
	2-1/2" BSPT (NPT optional)							7			-		-	
Float Options	Supplied with 316SS cylindrical float (4" / 101mm Insertion Length)	-								1				
	Supplied with 3165S cylindrical float (5" / 127mm Insertion Length)	_		_		_	-		-	2				
	Supplied with 31655 cylindrical float (6 -1/2" / 165mm Insertion Length)			_		_	÷	_	-	3			·	
	Custom Insertion Length - 6 5/8" to 14" / 168 to 356mm									C	-		-	
Contact Type	SPDT/SPCO											-		
	DPDT/DPCO	÷		-		_	·	_			1	D	-	
	Silver Alloy (Standard)	÷		_		_	÷				<u> </u>	-	-	
	Gold Flashed	-		-							1	AU	-	
2	Wireable Connection Head - Top Entry 1/2" NPT												-	W-NPT
ig	Wireable Connection Head - Side Entry 1/2" NPT												-	WL-NPT
Connection Options	Wireable Connection Head - Side Entry Rotatable 1/2" NPT													WLR-NPT
	Wireable Connection Head - Top Entry M20x1.5												-	W-M20
	Wireable Connection Head - Side Entry M20x1.5								+				-	WL-M20
	Wireable Connection Head - Side Entry Rotatable M20x1.5													WLR-M20
Ü	Customer specific (not affecting certification)								+		-		-	(X)